On page 15, after line 34, add the following new paragraph:

--Thus, while there have been shown and described and pointed out fundamental novel features of the present invention as applied to preferred embodiments thereof, it will be understood that various omissions and substitutions and changes in the form and details of the devices described and illustrated, and in their operation, and of the methods described may be made by those skilled in the art without departing from the spirit of the present invention. For example, it is expressly intended that all combinations of those elements and/or method steps which perform substantially the same function in substantially the same way to achieve the same results are within the scope of the invention. Substitutions of elements from one described embodiment to another are also fully intended and contemplated. It is also to be understood that the drawings are not necessarily drawn to scale but that they are merely conceptual in nature. It is the intention, therefore, to be limited only as indicated by the scope of the claims appended hereto.--.

IN THE CLAIMS:

Cancel claims 1 to 52, without prejudice.

Add the following new claims:

53. A method for supporting a web during the post-processing of a web of paper or board, the method comprising the steps of:

passing the web from a preceding section to at least one next downstream located web treatment section wherein to at least one side of the web is applied a treatment agent causing wetting of said side of said web;

passing the web exiting said web treatment section to at least one dryer apparatus; and

supporting the web contactingly in a continuous and unbroken manner at least from said web treatment section to said dryer.

54. The method of claim 53, further comprising:

drying the web with at least one drying apparatus prior to passing the web to said web treatment section; and

contactingly supporting the web in a continuous and unbroken manner at least from said drying apparatus preceding said web treatment section to said dryer apparatus located downstream next to said web treatment section.

55. The method of claim 54, wherein the web is supported by means of a dryer wire of a paper- or board making machine.

56. The method of claim 54, wherein the web is passed supported by a continuous support element at least from a drying apparatus preceding said web treatment section to the drying apparatus located downstream next to said web treatment section.

57. The method of claim 55, wherein the web is passed supported by a continuous support element at least from a drying apparatus preceding said web treatment section to the drying apparatus located downstream next to said web treatment section.

58. The method of claim 54, wherein the web is passed to at least one downstream located web treatment section supported by the continuous support element of the upstream preceding web treatment section.

59. The method of claim 53, wherein the web is passed supportedly and partially dried from an upstream preceding web treatment section to the next downstream located web treatment section.

60. The method of claim 56, wherein the web is supported by the support element through said web treatment section and during the entire web travel through the next downstream located drying apparatus.

61. The method of claim 57, wherein the web is supported by the support element through said web treatment section and during the entire web travel through the next downstream located drying apparatus.

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62. The method of claim 53, wherein the web is supportedly passed from the upstream preceding, web-wetting treatment section to the next downstream located web treatment section and the web is at least partially dried so that at least a portion of the moisture content of the web is evaporated.

63. The method of claim 59, wherein the web is passed to said web treatment section in a condition optimized with respect to at least one of the requirements of the paper grade being manufactured, the investment costs, the frequency of web breakages, the overall energy consumption of the process, desired paper quality, and a desired processing variable.

64. The method of claim 53, wherein the web is supported by a support element against a member of the web treatment apparatus that applies the web-wetting agent to the surface of the web.

65. The method of claim 64, wherein the support element is one of a film-transfer roll and blade coater.

66. The method of claim 53, wherein the web is at least partially dried by at least one of a microwave dryer, an air-impingement dryer, a contacting dryer, and a suction dryer,

and wherein the web is supported by a member of a material suitable for resisting the impact of said drying apparatus.

67. The method of claim 53, wherein the web is supported by at least one of a belt, a surfaced belt, and a fabric that is impermeable to moisture.

68. The method of claim 66, wherein the web is supported by at least one of a belt, a surfaced belt, and a fabric that is impermeable to moisture.

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69. The method of claim 53, wherein the web is supported by at least one of a wire, a fabric, a porous felt, and a porous or perforated belt that is permeable or absorbent to a liquid or gaseous medium.

70. The method of claim 66, wherein the web is supported by at least one of a wire, a fabric, a porous felt, and a porous or perforated belt that is permeable or absorbent to a liquid or gaseous medium.

71. The method of claim 53, wherein at least one surface of the web is coated with a coating which is transferred with the help of a movable member passing through an application nip or an application area.

72. The method of claim 71, wherein said application nip or application area is formed by a loading element comprising at least one of a roll, a belt and a sliding shoe.

73. The method of claim 53, wherein the web is supported in the first web treatment section by air-jet support means, after which the web is passed onto a contacting support

element for spreading the web, subjecting the same to measurement of process qualities or supportingly passing the web to subsequent web treatment sections.

74. The method of claim 53, wherein the web is supported by a plurality of successive support elements and the web is transferred supportedly or guided by web guidance means from one support element to the next support element in the succession.

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75. The method of claim 53, wherein the web is passed from one support element to the next by a web spreading or tension-controlling means.

76. The method of claim 74, wherein the web is passed from one support element to the next by a web spreading or tension-controlling means.

77. The method of claim 53, wherein the web is pressed against the surface of at least one roll serving to form a nip and apply a coating.

78. The method of claim 72, wherein the web is pressed against the surface of at least one roll serving to form a nip and apply a coating.

79. The method of claim 53, wherein the web is pressed against the surface of at least one sliding shoe element serving to form a nip and allowing a coat-applying planar element to slide thereon.

80. The method of claim 72, wherein the web is pressed against the surface of at least one sliding shoe element serving to form a nip and allowing a coat-applying planar element to slide thereon.

81. The method of claim 53, wherein a first side of the web is supported by a movable continuous support element, while a coating is applied to the second side of the web.

82. The method of claim 81, wherein the coating is applied to the second side of the web using one of a spray-coating method, a jet-coating method, a blade/rod coater, and an applicator roll coater.

83. The method of claim 53, wherein the web is adhered to the support element by at least one of air impingement and suction.

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84. The method of claim 81, wherein the web is adhered to the support element by at least one of air impingement and suction.

85. The method of claim 53, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

86. The method of claim 54, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

87. The method of claim 56, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

88. The method of claim 58, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

89. The method of claim 59, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

90. The method of claim 62, further comprising:

passing the web to a predryer cylinder group comprising at least one dryer cylinder and pressing the web against the cylinder by a single-wire support means;

supportedly passing the web to a treatment of the first side of the web, said web treatment comprising at least the application of a coating and the spreading/tensioning of the web; and

passing the web to a like treatment of its second side and then by means of a single-wire support means to a postdryer group.

91. The method of claim 53, wherein the web is supported by a succession of support elements whose surface qualities are selected so that the adherence of the web at the cross-over point of said support elements is stronger to the next downstream receiving support element than to the preceding upstream delivering support element.

92. The method of claim 91, wherein the web is supported by elements in which the surface of the delivering support element is more hydrophilic than the surface of the receiving support element.

93. The method of claim 91, wherein the web is supported by elements in which the surface of the delivering support element is softer than the surface of the receiving support element.

94. The method of claim 91, wherein the web is supported by elements in which the surface of the delivering support element has a coarser texture than the surface of the receiving support element.

95. The method of claim 91, wherein the web treatment device is a film-transfer coater, and wherein application of the treatment agent to at least one side of the web comprises the steps of:

passing the web transferred on a support wire of the dryer to a first support element;

passing the web from said first support element onto a surface of a first film-transfer applicator roll;

passing the web supported by an outer circumferential surface of said first film-transfer applicator roll onto a second film-transfer applicator roll; and

passing the web supported by an outer circumferential surface of said second film-transfer applicator roll onto a next downstream located contacting support element.

96. The method of claim 92, wherein the web treatment device is a film-transfer coater, and wherein application of the treatment agent to at least one side of the web comprises the steps of:

passing the web transferred on a support wire of the dryer to a first support element;

passing the web from said first support element onto a surface of a first film-transfer applicator roll;

passing the web supported by an outer circumferential surface of said first film-transfer applicator roll onto a second film-transfer applicator roll; and

passing the web supported by an outer circumferential surface of said second film-transfer applicator roll onto a next downstream located contacting support element.

97. The method of claim 93, wherein the web treatment device is a film-transfer coater, and wherein application of the treatment agent to at least one side of the web comprises the steps of:

passing the web transferred on a support wire of the dryer to a first support element;

passing the web from said first support element onto a surface of a first film-transfer applicator roll;

passing the web supported by an outer circumferential surface of said first film-transfer applicator roll onto a second film-transfer applicator roll; and

passing the web supported by an outer circumferential surface of said second film-transfer applicator roll onto a next downstream located contacting support element.

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98. The method of claim 94, wherein the web treatment device is a film-transfer coater, and wherein application of the treatment agent to at least one side of the web comprises the steps of:

passing the web transferred on a support wire of the dryer to a first support element;

passing the web from said first support element onto a surface of a first film-transfer applicator roll;

passing the web supported by an outer circumferential surface of said first film-transfer applicator roll onto a second film-transfer applicator roll; and

passing the web supported by an outer circumferential surface of said second film-transfer applicator roll onto a next downstream located contacting support element.

99. The method of claim 53, wherein the web is supported by a movable element comprised of one of a metal, a polymer, a glass fiber, a carbon fiber belt, a wire, a felt, a web, and a band.

100. The method of claim 91, wherein the web is supported by a movable element comprised of one of a metal, a polymer, a glass fiber, a carbon fiber belt, a wire, a felt, a web, and a band.

101. The method of claim 53, wherein the web is supported in the film-transfer coater by means of a support belt that transfers a web treatment agent to the surface of the web.

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102. The method of claim 72, wherein the web is supported in the film-transfer coater by means of a support belt that transfers a web treatment agent to the surface of the web.

103. The method of claim 91, wherein the web is supported in the film-transfer coater by means of a support belt that transfers a web treatment agent to the surface of the web.

104. An apparatus for supportedly guiding a web during the post-processing of a web of paper or board, comprising:

at least one web treatment device for applying to at least one surface of the web a treatment agent that wets the web;

at least one device preceding said web treatment device; and

a means for passing the web from said preceding device to at least one next downstream located web treatment device; and

at least one support element for passing the web in a continuous and unbroken manner at least from said web treatment device to a next downstream located dryer.

105. The apparatus of claim 104, further comprising:

at least one dryer for drying the web prior to passing the web to said web treatment device; and

a support element for contactingly supporting the web in a continuous and unbroken manner at least from said dryer preceding said web treatment device to said dryer located downstream next to said web treatment device.

106. The apparatus of claim 104, wherein said element for passing the web is a dryer wire of a paper or boardmaking machine.

107. The apparatus of claim 104, wherein a single continuous support element is used for passing the web in a supported manner at least from said dryer preceding said web treatment device to said dryer located downstream next to said web treatment device.

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108. The apparatus of claim 104, wherein a single continuous support element is used for passing the web to at least one next downstream web treatment device from an upstream preceding web treatment device.

109. The apparatus of claim 108, wherein a single support element is used for supporting the web through said web treatment device and during the entire web travel through the next downstream located dryer.

110. The apparatus of claim 104, wherein at least one support element is adapted to support the web so as press the web against a member of the web treatment section that applies the web-wetting agent to the surface of the web.

111. The apparatus of claim 110, wherein the at least one support element is one of a film-transfer roll and blade coater.

112. The apparatus of claim 104, wherein the dryer comprises at least one of a microwave dryer, an air-impingement dryer, a contacting dryer, and a suction dryer, and wherein the web is supported by a support member of a material suitable for resisting the impact of said dryer.

113. The apparatus of claim 104, wherein said support element is one of a belt and surfaced belt or fabric that is impermeable to moisture.

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114. The apparatus of claim 112, wherein said support element is one of a belt and surfaced belt or fabric that is impermeable to moisture.

115. The apparatus of claim 104, wherein said support member is one of a fabric, porous felt, and a porous or perforated belt that is permeable or absorbent to a liquid or gaseous medium.

116. The apparatus of claim 112, wherein said support member is one of a fabric, porous felt, and a porous or perforated belt that is permeable or absorbent to a liquid or gaseous medium.

117. The apparatus of claim 104, further comprising at least one movable element capable of defining at least one application nip or area, in which nip or area at least one surface of the web is coated with a coating transferred with the help of said movable member passing through said application nip or area.

118. The apparatus of claim 117, wherein said application nip or area is comprised of a loading element.

119. The apparatus of claim 118, wherein said loading element comprises one of a roll, a belt, and a sliding shoe.

120. The apparatus of claim 104, further comprising a web guidance means and a plurality of successive support elements supporting the web and to transfer the web supportedly or guided by the web guidance means from one support element to the next support element in the succession.

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121. The apparatus of claim 104, further comprising a movable continuous support element and a means for supportedly pressing a first side of the web against the movable continuous support element, and further comprising means for applying a coating to the second side of the web.

122. The apparatus of claim 121, wherein the means for applying a coating to the second side of the web employs one of a spray-coating method, a jet-coating method, a blade/rod coater and an applicator roll coater.

123. The apparatus of claim 104, further comprising at least one of air-impingement and suction means to cause the web to adhere to the support element.

124. The apparatus of claim 121, further comprising at least one of air-impingement and suction means to cause the web to adhere to the support element.

125. The apparatus of claim 104, wherein a surface of the support element is patterned with a desired surface texture to make a desired surface or base coating pattern on the web side to be treated.

126. The apparatus of claim 104, further comprising a succession of support elements to support the web, said support elements having their surface qualities selected so as to make adherence of the web at a cross-over point of said support elements stronger to a next downstream receiving support element than to a preceding upstream delivering support element.

127. The apparatus of claim 126, wherein a surface of a delivering element is more hydrophilic than a surface of a receiving element.

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128. The apparatus of claim 126, wherein a surface of a delivering element has a coarser texture than that of a surface of a receiving element.

129. The apparatus of claim 126, wherein the surface of the delivering element is softer than the surface of the receiving element.

130. The apparatus of claim 126, wherein said web treatment device is a film-transfer coater, and wherein said web treatment device comprises:

a first film-transfer applicator roll;

a first support element on which the web is transferred onto a surface of the first film-transfer applicator roll;

a second film-transfer applicator roll receiving the web which has been transferred and supported by the surface of the first film-transfer applicator roll; and

a next downstream located, contacting support element serving to receive the web which has been transferred and supported by the surface of the second film-transfer applicator roll.

131. The apparatus of claim 127, wherein said web treatment device is a film-transfer coater, and wherein said web treatment device comprises:

a first film-transfer applicator roll;

a first support element on which the web is transferred onto a surface of the first film-transfer applicator roll;

a second film-transfer applicator roll receiving the web which has been transferred and supported by the surface of the first film-transfer applicator roll; and

a next downstream located, contacting support element serving to receive the web which has been transferred and supported by the surface of the second film-transfer applicator roll.

132. The apparatus of claim 129, wherein said web treatment device is a film-transfer coater, and wherein said web treatment device comprises:

a first film-transfer applicator roll;

a first support element on which the web is transferred onto a surface of the first film-transfer applicator roll;

a second film-transfer applicator roll receiving the web which has been transferred and supported by the surface of the first film-transfer applicator roll; and

a next downstream located, contacting support element serving to receive the web which has been transferred and supported by the surface of the second film-transfer applicator roll.

133. The apparatus of claim 104, further comprising by a movable element to support the web, comprised of one of a metal, a polymer, a glass fiber, a carbon fiber belt, a wire, a felt, a web, and a band.

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134. The apparatus of claim 126, further comprising by a movable element to support the web, comprised of one of a metal, a polymer, a glass fiber, a carbon fiber belt, a wire, a felt, a web, and a band.